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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,053	09/25/2003	Yuusaku Ohta	2003-1371A	4723

513 7590 03/20/2007
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

MUI, GARY

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/670,053

Applicant(s)

OHTA ET AL.

Examiner

Gary Mui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claim 20 is objected to under 37 CFR 1.75 because of the following informalities:

For claim 20 line 2, the occurrence of "the Advance Encryption Standard" should be changed to --an Advance Encryption Standard--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 14 – 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 14, the recitation of “acquiring the time-to-live of the IP packet received from the second communication device” is vague and indefinite because it is not known how the second communication device is acquiring the time-to-live of the IP packet from itself. Similar problem exists for claims 15 – 17.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 16 and 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For claim 16, the claim is directed to a computer program pre se, which is non-statutory subject matter. The claim recites a computer program pre se without instructions and without computer executable instructions the program cannot be carried out to perform the functions.

For claim 17, the claim is directed to a computer program pre see, which is non-statutory subject matter. The claim recites a computer program without the use of a computer readable medium and without a computer readable medium stored with, embodied with, or encoded with the program cannot be carried out to perform the functions.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, and 14 – 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Beaumont et al. (US 6,959,333 B2).

For claim 1, Beaumont et al. teaches an acquiring unit operable to acquire a time-to-live of an IP packet received from the other communication device (see column 2 lines 8 – 11, content delivery server receives TTL from the DNS); a judging unit operable to judge whether the acquired time-to-live is less than or equal to the predetermined value (see column 2 lines 11 – 17, compares the TTL values to determine the shortest estimated distance); and a communication unit operable, to conduct content transmission/reception with the other communication device only when the judging unit has judged that the acquired time-to-live is less than or equal to the predetermined value (see column 2 lines 5 – 7, transmitting content with the shortest estimated distance).

For claims 14 and 15, Beaumont et al. teaches a method using a system for setting unit operable to set a time-to-live of an IP packet for transmission to the second communication device to a predetermined value (see column 7 lines 34 – 36, updating the TTL value) and an acquiring unit operable to acquire the time-to-live of the IP packet received from the second communication device (see column 2 lines 8 – 11, content delivery server receives TTL from the DNS); a judging unit to judge whether the acquired time-to-live is less than or equal to the predetermined value (see column 2 lines 11 – 17, compares the TTL values to determine the shortest estimated distance); and a communication unit operable to conduct content transmission/reception with the first communication apparatus only when the judging unit has judged that the acquired time-

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to-live is less than or equal to the predetermined value (see column 2 lines 5 – 7, transmitting content with the shortest estimated distance).

For claims 16 and 17, Beaumont et al. teaches a computer-readable medium having recorded thereon a content distribution computer programming executing the method (see column 2 lines 43 – 45, the method is executed using conventional computer program techniques).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 5, 6, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaumont et al. in view of Joyner et al. (US 2003/0108205 A1).

For claim 5, Beaumont et al. teaches all of the claimed subject matter with the exception of a key sharing unit operable to share key information with the other communication device. Joyner et al. from the same field of endeavor teaches one or more public keys are received from the device and then validated (see paragraph 0005 lines 2 – 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include share key information as taught by Joyner et al. into the device of Beaumont et al. The motivation for doing this is to ensure that the data is secure and the device will be the only one who can read the data.

For claims 6 and 20, Beaumont et al. teaches all of the claimed subject matter of the claimed invention with the exception of an encryption unit operable, using the shared key information, to encrypt contents and decrypt encrypted contents, wherein the communication unit transmits/receives encrypted contents; and the encryption unit performs encryption based on an Advance Encryption Standard. Joyner et al. from the same field of endeavor teaches the server encrypts the content and stores the encrypted content along with the encryption key in a data storage device. The present invention can use any desired standard or proprietary encryption process, such as a triple Data Encryption Standard ("3DES") algorithm, an Advanced Encryption Standard ("AES") algorithm, or a linear feedback shift register ("LFSR") sequence. The server may encrypt and store several versions of the same content.

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For example, the same movie could be made available in MPEG-2 and MPEG-4 formats. Moreover, each of these formats could be made available in more than one encrypted format, such as 3DES and AES. The server also authenticates the client 106 and provides the secure transmission link to the client via network. Once a client is properly authenticated, the server retrieves the requested content from the data storage device for delivery to the client (see paragraph 0027 lines 4 – 21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the encryption unit of Joyner et al. into the device of Beaumont et al. The motivation for doing this is to maintain a high level of security for sensitive information.

Claim Rejections - 35 USC § 103

13. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaumont et al. in view of the background Ishiguro et al. (US 2003/0105956 A1).

For claims 18 and 19, Beaumont et al. teaches all of the claimed subject matter with the exception of an invalidation information acquiring unit operable to acquire, via a network, invalidation information identifying an invalidated communication device, and a storage unit operable to store the invalidation information acquired by the invalidation information acquiring unit; a comparison unit operable to compare the acquired invalidation information and the invalidation information stored by the storage unit; and an updating unit operable, when the acquired invalidation information and the invalidation information stored by the storage unit do not match, to replace the stored invalidation information with the acquired invalidation information. Ishiguro et al. discloses in the background the private key of a

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user's device might be revealed, and an invalid user device might receive a content, storing that private key and pretending to be the invalid device. To cope with such a case, a key control center distributes a revocation list called invalid device list or blacklist containing IDs of invalid devices, to valid devices, and the valid devices use the revocation list to confirm whether ID of a communicating party is included in the list or not (see paragraph 0013). The revocation list is prepared by listing IDs of invalid devices and appending the signature of the key issuing center for preventing falsification. The revocation list is called CRL (certification revocation list), which is sequentially updated and distributed to the valid devices every time a new invalid device is generated (see paragraph 0014 lines 1 – 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a list of up to date invalid devices as disclosed in the background of Ishiguro et al. into the device of Beaumont et al. The motivation for doing this is by having and maintaining a blacklist of users there will be added security and will help in preventing illegal access.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hurst et al. (US 6,192,404 B1), Pochon et al. (US 2003/0048793 A1), Li et al. (US 2003/0123438 A1), Fransdonk (US 2003/0161476 A1), Banerjee et al. (US 2003/0233540 A1), Nakano et al. (US 2004/0098579 A1), Rune et al. (US 2004/0156384 A1) and Endo et al. (US 2005/0198662 A1) are cited to show a content distribution system.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Mui whose telephone number is (571) 270-1420. The examiner can normally be reached on Mon. - Thurs. 9 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GM

03-13-2007


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER